

1) Use the drag button to explore how the candle changes over time for Burning Candle1. What type of relationship would you consider this?

Linear (13)

Exponential (0)

Quadratic (0)

Logarithmic (0)

Exponential	0	0%
Linear	13	100%
Quadratic	0	0%
Logarithmic	0	0%

Jul 7-11:10 AM

For Burning Candle1, what will be the height of the candle after 60 minutes?

0 inches (0)

3 inches (0)

5 inches (10)

8 inches (3)

0 inches	0	0%
3 inches	0	0%
5 inches	10	77%
8 inches	3	23%

Handwritten notes:

Graph showing height vs time:

0	→	20
20	→	15
40	→	10
60	→	5

Equations:

$$y = -0.25x + 20$$
$$y = -0.25(60) + 20$$
$$y = -15 + 20$$
$$y = 5$$

Every 4, goes down 1 in
So $\frac{60}{4} = 15$ inches $20 - 15 = 5$

Jul 7-11:12 AM

4) For Burning Candle1, how long will it take for the candle to burn completely?

100 minutes (4)

40 minutes (0)

60 minutes (0)

80 minutes (5)

40 minutes	0	0%
60 minutes	0	0%
80 minutes	5	56%
100 minutes	4	31%

Handwritten notes:

height

$$y = -0.25x + 20$$
$$0 = -0.25x + 20$$
$$-20 = -0.25x$$
$$\frac{-20}{-0.25} = \frac{-0.25x}{-0.25}$$
$$80 = x$$

Jul 7-11:17 AM